

1. Study the extract below and answer the questions that follow.

Railway network hits 50-year high as people crowd onto trains

- ❶ V/Line, the company that manages the railway system in Australia, is experiencing increased demand for its services, both from rural areas to the city, and within the suburbs around the city.
- ❷ **Rural areas to city train travel**
There has been a record 50-year high with almost nine million railway journeys made across the rural railway system this year. The number of people using the rail network rose by 9.5 %. The chief executive of V/Line said the recent reduction of 20 % in fares and 400 extra services helped increase the number of people using the service.
- ❸ Eight years ago the government promised to increase the rail **infrastructure** with new fast trains to the city of Melbourne. The new fast trains have created new private investments, new jobs and more income in the rural areas. They have also led to a housing price boom in these rural areas as more people have moved there.
- ❹ Another result of this increase in demand for train travel is that more travellers are being forced to stand up, or bring their own chairs to sit on when travelling to and from the city. Every available train is being used and the government has just ordered another 24 trains to add to passenger capacity, and has provided more money to employ 24 new train drivers.
- ❺ **Suburban train travel**
Increased demand is also occurring on suburban railway lines, where passenger use has increased to a 50-year high. This increase in use was totally unexpected. A combination of higher petrol (gasoline) prices, interest rate rises and a society now aware of climate change has led to a public transport problem.
- ❻ As an example, a recent study by transport expert Graham Currie, found that for every 10 % rise in petrol (gasoline) prices, rail demand increased by 5 %. Based on these figures he estimates the **cross-elasticity of demand** to be 0.5. This figure indicates that rising petrol (gasoline) prices have contributed to increased demand for train travel.

[Source: adapted from Stephen Moynihan, *The Age*, 5 May 2007]

(This question continues on the following page)

(Question 1 continued)

- (a) Define the following terms indicated in bold in the text:
- (i) infrastructure (*paragraph 3*) *[2 marks]*
 - (ii) cross-elasticity of demand (*paragraph 6*). *[2 marks]*
- (b) Using an appropriate diagram, explain why the demand for rail travel increases when the petrol (gasoline) prices rise (*paragraph 6*). *[4 marks]*
- (c) Using an appropriate diagram, explain why the supply of infrastructure is likely to be inelastic in the short term. *[4 marks]*
- (d) Using information from the text/data and your knowledge of economics, evaluate factors that could contribute to increased use of rail services in Australia. *[8 marks]*